

Amendments to the Specification:

After the title of the invention and before the heading "Background of The Invention" insert the following:

CROSS REFERENCE TO RELATED APPLICATION

This is a continuation of U.S. Application Serial No. 09/990,640 filed November 21, 2001, which claims priority to U. S. Provisional Application Serial No. 60/278,102, filed March 23, 2001, the disclosure of each of which is incorporated by reference herein.

Please replace paragraph [0017] with the following amended paragraph:

[0017] The additive is not limited to an oxide of aluminum. The additive for the coating may include one or more of other oxides, compounds, or their precursors of Al, Hf, Si, Ln (rare earth including whole lanthanum series and Y) Mg, Mo, Ni, Nb, Sr, Ti, and/ or Zr. Those additives may affect the CTE of tantalum oxide, mostly shifting it higher. An additive such as La₂O₃ can induce an acicular-grain-shaped second phase having the formula La₂Ta₁₂O₃₃, and thereby produce a duplex microstructure that results in a strong material with high toughness. By way of non-limiting example, the amount of La₂O₃ in the coating may be in the range of about 1-10 mol%. Additional additives (e.g., nitrides, carbides, borides, silicides) can be introduced to further inhibit grain

growth, modify CTE, and reinforce tantalum oxide. These additives result in lower grain growth, higher CTE and increased fracture toughness.